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PATENT P56604

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

JU-IL LEE

Serial No.:

10/073,898

Examiner:

to be assigned

Filed:

14 February 2002

Art Unit:

2652

For:

APPARATUS AND METHOD FOR PERFORMING SEEK-SERVO ROUTINE OF

HARD DISK DRIVE

II S Potent No.

## INFORMATION DISCLOSURE STATEMENT RECEIVED

JUL 0 9 2002

Technology Center 2000

Issued Date

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Pursuant to 37 CFR §§1.56, 1.97 and 1.98, applicant cites, and provides copies of the following art references:

Inventor(s)

	U.S. Patent No.	inventor(s)	Issueu Date
✓	6,101,065	Alfred et al.	8 August 2000
	Foreign Patent No.	Inventor(s)	<b>Issued Date</b>
•	EP 0 263 962	Knowles	20 April 1988
✓	WO 88/02913	Seaver et al.	21 April 1988
✓	EP 0 441 407	Mizoshita et al.	14 August 1991
1	GB 2 342 492	Kang et al.	12 April 2000

## **Other Documents**

✓ United Kingdom Patent Office Combined Search and Examination Report application No. GB 0125017.4 dated 23 May 2002.

## **Discussion**

Alfred '065 uses a servo controller that commands the actuator to perform a seek from a current position to a target position using a profile of command effort to the actuator.

Knowles '962 shows a disc drive memory in which acceleration profile and time varying track position trajectory signals, both of which are said by Knowles to be related to seek length and have corresponding time durations, or respectively simultaneously coupled to an output section as a feed forward signal, and to an input section, as a desired position signal, of a single track follower loop of a disc drive.

Seaver '913 uses an alterable acceleration and deceleration profile to reduce the acoustical noise generated during seek operations.

Mizoshita '407 provides a disc drive where the target position, target velocity and target acceleration are indicated as polynomials of time on the basis of acceleration and deceleration covers that minimize square integration value of differential value of acceleration of the transducer and a target position-target velocity and target acceleration of each time are computed in an arithmetic controller using these polynomials.

Kang '492 shows a hard disc drive and a method of controlling movement of a transducer to assure that acceleration across the surface of the rotating disc is a substantially sinusoidal function of time.

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The citation of the foregoing references is not intended to constitute an assertion that other

or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging

and thorough search of the relative arts.

Pursuant to 37 CFR §1.97(d), the undersigned attorney hereby certifies that each item of

information contained in this Information disclosure statement was cited in a communication from

a foreign patent office in a counterpart foreign patent application not more than three months prior

to the filing of the statement.

No fee is incurred by filing this Information Disclosure Statement. Should any fee remain

or be required for filing of this Information Disclosure Statement, the Commissioner is authorized

to charge the Deposit Account No. 02-4943 and advise the undersigned attorney accordingly.

Respectfully submitted,

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I.D.: REB/ahm

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